Review of: "Forecasting by Analogy: A Parallel between the Trend of Confirmed COVID-19 Deaths in the Winters of 2022/2023 and 2023/2024 in Italy"

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Potential competing interests: No potential competing interests to declare.

In this review, I embark on a critical examination of the manuscript "Forecasting by Analogy: A Parallel between the Trend of Confirmed COVID-19 Deaths in the Winters of 2022/2023 and 2023/2024 in Italy." The objective is to scrutinize the methodological approach, data reliability, analytical rigor, and the paper's overall contribution to the field of epidemiological forecasting. Through this lens, I assessed the manuscript's potential for advancing understanding in the discipline, its adherence to scientific standards, and its relevance to current challenges in public health. This process involves a detailed evaluation of the paper's strengths and weaknesses, with a focus on its innovative aspects, the robustness of its findings, and its implications for policy and practice.

The paper employs an analogical approach to predict COVID-19 death trends. It draws on the previous year's data to estimate future outcomes, emphasizing the methodology's limitations and acknowledging the potential for error in such predictions.

Comments for Rejection:

Methodological Concerns: The reliance on analogy for forecasting, while innovative, lacks the rigor and reliability of more established epidemiological models. The assumption that future trends will mirror past patterns without accounting for variables such as vaccination rates, virus mutations, and changes in public health policies weakens the study's scientific robustness.

Data Reliability: The study bases its predictions on a singular data source without cross-validation with other data sets. This approach could introduce bias or errors if the primary source has inaccuracies or does not fully capture the pandemic's dynamics.

Lack of Novelty: While the approach is interesting, the paper does not sufficiently advance the field of epidemiological forecasting. The methodology primarily repurposes existing data without incorporating new analytical techniques or offering insights that significantly depart from current knowledge.

Potential Misinterpretation: The paper's conclusion might be prematurely reassuring or alarming due to its speculative nature. Predictive modeling of this sort should be approached with caution to avoid misinforming policy decisions or public perception.

Comparative Analysis Limitations: The paper does not thoroughly address the differences between the compared periods, such as changes in the virus's behavior, public health interventions, or societal behaviors, which could significantly impact the validity of its predictions.

In summary, while the paper presents an intriguing concept, it falls short in terms of methodological rigor, data diversity, and practical contributions to the field of epidemiological forecasting. Further refinement and incorporation of more robust modeling techniques would be necessary for future consideration.